Claims

I claim:

- 1. A statin analog that inhibits HMG-CoA reductase and has at least one characteristic chosen from the group consisting of:
 - a. the compound is metabolized both by CYP450 and by a non-oxidative metabolic enzyme or system of enzymes;
 - b. the compound has a short (up to four (4) hours) non-oxidative metabolic half-life;
 - c. the compound contains a hydrolysable bond that can be cleaved non-oxidatively by hydrolytic enzymes;
 - d. the primary metabolites of the compound result from the non-oxidative metabolism of the compound;
 - e. the primary metabolites are soluble in water at physiological pH;
 - f. the primary metabolites have negligible inhibitory activity at the IK_R (HERG) channel at normal therapeutic concentration of the parent drug in plasma;
 - g. the compound, as well as the metabolites thereof, does not cause metabolic DDI when co-administered with other drugs; and
 - h. the compound, as well as metabolites thereof, does not elevate LFT values when administered alone.

2. The inhibitor of HMG-CoA reductase, according to claim 1, having a structure selected from the group consisting of:

3. The compound, according to claim 1, wherein said compound has a structure selected from the group consisting of:

4. The compound, according to claim 1, wherein said compound has a structure selected from the group consisting of:

- 5. A pharmaceutical composition comprising a statin analog that inhibits HMG-CoA reductase and has at least one characteristic chosen from the group consisting of:
 - a. the compound is metabolized both by CYP450 and by a non-oxidative metabolic enzyme or system of enzymes;
 - b. the compound has a short (up to four (4) hours) non-oxidative metabolic half-life;
 - c. the compound contains a hydrolysable bond that can be cleaved non-oxidatively by hydrolytic enzymes;
 - d. the primary metabolites of the compound result from the non-oxidative metabolism of the compound;
 - e. the primary metabolites are soluble in water at physiological pH;
 - f. the primary metabolites have negligible inhibitory activity at the IK_R (HERG) channel at normal therapeutic concentration of the parent drug in plasma;
 - g. the compound, as well as the metabolites thereof, does not cause metabolic DDI when co-administered with other drugs; and
 - h. the compound, as well as metabolites thereof, does not elevate LFT values when administered alone;

wherein said composition further comprises a pharmaceutical carrier.

6. The pharmaceutical composition, according to claim 5, wherein said compound has a structure selected from the group consisting of:

7. The pharmaceutical composition, according to claim 5, wherein said compound has a structure selected from the group consisting of:

8. The composition, according to claim 5, wherein said compound has a structure selected from the group consisting of:

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- 9. A method for inhibiting HMG-CoA reductase in an individual in need of such treatment wherein said method comprises administering to said individual a pharmaceutical composition comprising a statin analog that inhibits HMG-CoA reductase and has at least one characteristic chosen from the group consisting of:
 - a. the compound is metabolized both by CYP450 and by a non-oxidative metabolic enzyme or system of enzymes;
 - b. the compound has a short (up to four (4) hours) non-oxidative metabolic half-life;
 - c. the compound contains a hydrolysable bond that can be cleaved non-oxidatively by hydrolytic enzymes;
 - d. the primary metabolites of the compound result from the non-oxidative metabolism of the compound;
 - e. the primary metabolites are soluble in water at physiological pH;
 - f. the primary metabolites have negligible inhibitory activity at the IK_R (HERG) channel at normal therapeutic concentration of the parent drug in plasma;
 - g. the compound, as well as the metabolites thereof, does not cause metabolic DDI when co-administered with other drugs; and
 - h. the compound, as well as metabolites thereof, does not elevate LFT values when administered alone.

10. The method, according to claim 9, wherein said compound has a structure selected from the group consisting of:

11. The method, according to claim 9, wherein said compound has a structure selected from the group consisting of:

12. The method, according to claim 9, wherein said compound has a structure selected from the group consisting of:

- 13. The method, according to claim 9, wherein the individual is a human.
- 14. The method, according to claim 9, wherein said method is used to lower cholesterol levels.